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RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/083,446

DATE: 03/14/2002
TIME: 12:23:41

Input Set : A:\PTO.VSK.txt
Output Set: N:\CRF3\03142002\J083446.raw

SEQUENCE LISTING

4 (1) GENERAL INFORMATION:

6 (i) APPLICANT: Abrams, Mark A.
7 Bauer, S. C.
8 Braford-Goldberg, Sarah R.
9 Caparon, Maire H.
10 Easton, Alan M.
11 Klein, Barbara K.
12 McKearn, John P.
13 Olins, Peter O.
14 Paik, Kumnan
15 Thomas, John W.

17 (ii) TITLE OF INVENTION: Methods Of Ex-Vivo Expansion Of Hematopoietic Cells
18 Using Multivariant (IL-3) Hematopoiesis Chimera Proteins

20 (iii) NUMBER OF SEQUENCES: 197

22 (iv) CORRESPONDENCE ADDRESS:

23 (A) ADDRESSEE: S. Christopher Bauer, Pharmacia Corporation
24 Corporate Patent Dept., Mail Zone 04E

25 (B) STREET: 800 N. Lindbergh

26 (C) CITY: St. Louis

27 (D) STATE: Missouri

28 (E) COUNTRY: USA

29 (F) ZIP: 63167

31 (v) COMPUTER READABLE FORM:

32 (A) MEDIUM TYPE: Floppy disk

33 (B) COMPUTER: IBM PC compatible

34 (C) OPERATING SYSTEM: PC-DOS/MS-DOS

35 (D) SOFTWARE: PatentIn Release #1.0, Version #1.25

37 (vi) CURRENT APPLICATION DATA:

C--> 38 (A) APPLICATION NUMBER: US/10/083,446

C--> 39 (B) FILING DATE: 26-Feb-2002

40 (C) CLASSIFICATION:

50 (vii) PRIOR APPLICATION DATA:

43 (A) APPLICATION NUMBER: 08/762,227

44 (B) FILING DATE: 09-DEC-1996

47 (A) APPLICATION NUMBER: US 08/192,325

48 (B) FILING DATE: 14-FEB-1994

51 (A) APPLICATION NUMBER: US 08/446,872

52 (B) FILING DATE: 06-JUN-1995

55 (viii) ATTORNEY/AGENT INFORMATION:

56 (A) NAME: S. Christopher Bauer

57 (B) REGISTRATION NUMBER: 42,305

58 (C) REFERENCE/DOCKET NUMBER: C-2790/6

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60 (ix) TELECOMMUNICATION INFORMATION:
61 (A) TELEPHONE: (636)737-6257
62 (B) TELEFAX: (636)737-5452
65 (2) INFORMATION FOR SEQ ID NO: 1:
67 (i) SEQUENCE CHARACTERISTICS:
68 (A) LENGTH: 133 amino acids
69 (B) TYPE: amino acid
70 (D) TOPOLOGY: linear
72 (ii) MOLECULE TYPE: peptide
75 (ix) FEATURE:
76 (A) NAME/KEY: Modified-site
77 (B) LOCATION: 1
78 (D) OTHER INFORMATION: /note= "Met- may or may not precede the
79 amino acid in position 1"
81 (ix) FEATURE:
82 (A) NAME/KEY: Modified-site
83 (B) LOCATION: 17
84 (D) OTHER INFORMATION: /note= "Xaa at position 17 is Ser,
85 Lys, Gly, Asp, Met, Gln, or Arg"
87 (ix) FEATURE:
88 (A) NAME/KEY: Modified-site
89 (B) LOCATION: 18
90 (D) OTHER INFORMATION: /note= "Xaa at position 18 is Asn,
91 His, Leu, Ile, Phe, Arg, or Gln"
93 (ix) FEATURE:
94 (A) NAME/KEY: Modified-site
95 (B) LOCATION: 19
96 (D) OTHER INFORMATION: /note= "Xaa at position 19 is Met,
97 Phe, Ile, Arg, Gly, Ala, or Cys"
99 (ix) FEATURE:
100 (A) NAME/KEY: Modified-site
101 (B) LOCATION: 20
102 (D) OTHER INFORMATION: /note= "Xaa at position 20 is Ile,
103 Cys, Gln, Glu, Arg, Pro, or Ala"
105 (ix) FEATURE:
106 (A) NAME/KEY: Modified-site
107 (B) LOCATION: 21
108 (D) OTHER INFORMATION: /note= "Xaa at position 21 is Asp,
109 Phe, Lys, Arg, Ala, Gly, Glu, Gln, Asn, Thr, Ser,
110 or Val"
112 (ix) FEATURE:
113 (A) NAME/KEY: Modified-site
114 (B) LOCATION: 22
115 (D) OTHER INFORMATION: /note= "Xaa at position 22 is Glu,
116 Trp, Pro, Ser, Ala, His, Asp, Asn, Gln, Leu, Val,
117 or Gly"
119 (ix) FEATURE:
120 (A) NAME/KEY: Modified-site
121 (B) LOCATION: 23

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122 (D) OTHER INFORMATION: /note= "Xaa at position 23 is Ile,
123 Val, Ala, Leu, Gly, Trp, Lys, Phe, Ser, or
124 Arg"
126 (ix) FEATURE:
127 (A) NAME/KEY: Modified-site
128 (B) LOCATION: 24
129 (D) OTHER INFORMATION: /note= "Xaa at position 24 is Ile,
130 Gly, Val, Arg, Ser, Phe, or Leu"
132 (ix) FEATURE:
133 (A) NAME/KEY: Modified-site
134 (B) LOCATION: 25
135 (D) OTHER INFORMATION: /note= "Xaa at position 25 is Thr,
136 His, Gly, Gln, Arg, Pro, or Ala"
138 (ix) FEATURE:
139 (A) NAME/KEY: Modified-site
140 (B) LOCATION: 26
141 (D) OTHER INFORMATION: /note= "Xaa at position 26 is His,
142 Thr, Phe, Gly, Arg, Ala, or Trp"
144 (ix) FEATURE:
145 (A) NAME/KEY: Modified-site
146 (B) LOCATION: 27
147 (D) OTHER INFORMATION: /note= "Xaa at position 27 is Leu,
148 Gly, Arg, Thr, Ser, or Ala"
150 (ix) FEATURE:
151 (A) NAME/KEY: Modified-site
152 (B) LOCATION: 28
153 (D) OTHER INFORMATION: /note= "Xaa at position 28 is Lys,
154 Arg, Leu, Gln, Gly, Pro, Val, or Trp"
156 (ix) FEATURE:
157 (A) NAME/KEY: Modified-site
158 (B) LOCATION: 29
159 (D) OTHER INFORMATION: /note= "Xaa at position 29 is Gln,
160 Asn, Leu, Pro, Arg, or Val"
162 (ix) FEATURE:
163 (A) NAME/KEY: Modified-site
164 (B) LOCATION: 30
165 (D) OTHER INFORMATION: /note= "Xaa at position 30 is Pro,
166 His, Thr, Gly, Asp, Gln, Ser, Leu, or Lys"
168 (ix) FEATURE:
169 (A) NAME/KEY: Modified-site
170 (B) LOCATION: 31
171 (D) OTHER INFORMATION: /note= "Xaa at position 31 is Pro,
172 Asp, Gly, Ala, Arg, Leu, or Gln"
174 (ix) FEATURE:
175 (A) NAME/KEY: Modified-site
176 (B) LOCATION: 32
177 (D) OTHER INFORMATION: /note= "Xaa at position 32 is Leu,
178 Val, Arg, Gln, Asn, Gly, Ala, or Glu"
180 (ix) FEATURE:

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181 (A) NAME/KEY: Modified-site
182 (B) LOCATION: 33
183 (D) OTHER INFORMATION: /note= "Xaa at position 33 is Pro,
184 Leu, Gln, Ala, Thr, or Glu"
186 (ix) FEATURE:
187 (A) NAME/KEY: Modified-site
188 (B) LOCATION: 34
189 (D) OTHER INFORMATION: /note= "Xaa at position 34 is Leu,
190 Val, Gly, Ser, Lys, Glu, Gln, Thr, Arg, Ala, Phe,
191 Ile, or Met"
193 (ix) FEATURE:
194 (A) NAME/KEY: Modified-site
195 (B) LOCATION: 35
196 (D) OTHER INFORMATION: /note= "Xaa at position 35 is Leu,
197 Ala, Gly, Asn, Pro, Gln, or Val"
199 (ix) FEATURE:
200 (A) NAME/KEY: Modified-site
201 (B) LOCATION: 36
202 (D) OTHER INFORMATION: /note= "Xaa at position 36 is Asp,
203 Leu, or Val"
205 (ix) FEATURE:
206 (A) NAME/KEY: Modified-site
207 (B) LOCATION: 37
208 (D) OTHER INFORMATION: /note= "Xaa at position 37 is Phe,
209 Ser, Pro, Trp, or Ile"
211 (ix) FEATURE:
212 (A) NAME/KEY: Modified-site
213 (B) LOCATION: 38
214 (D) OTHER INFORMATION: /note= "Xaa at position 38 is Asn,
215 or Ala"
217 (ix) FEATURE:
218 (A) NAME/KEY: Modified-site
219 (B) LOCATION: 40
220 (D) OTHER INFORMATION: /note= "Xaa at position 40 is Leu,
221 Trp, or Arg"
223 (ix) FEATURE:
224 (A) NAME/KEY: Modified-site
225 (B) LOCATION: 41
226 (D) OTHER INFORMATION: /note= "Xaa at position 41 is Asn,
227 Cys, Arg, Leu, His, Met, or Pro"
229 (ix) FEATURE:
230 (A) NAME/KEY: Modified-site
231 (B) LOCATION: 42
232 (D) OTHER INFORMATION: /note= "Xaa at position 42 is Gly,
233 Asp, Ser, Cys, Asn, Lys, Thr, Leu, Val, Glu, Phe, Tyr,
234 Ile, Met, or Ala"
236 (ix) FEATURE:
237 (A) NAME/KEY: Modified-site
238 (B) LOCATION: 43

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239 (D) OTHER INFORMATION: /note= "Xaa at position 43 is Glu,
240 Asn, Tyr, Leu, Phe, Asp, Ala, Cys, Gln, Arg, Thr, Gly,
241 or Ser"
243 (ix) FEATURE:
244 (A) NAME/KEY: Modified-site
245 (B) LOCATION: 44
246 (D) OTHER INFORMATION: /note= "Xaa at position 44 is Asp,
247 Ser, Leu, Arg, Lys, Thr, Met, Trp, Glu, Asn, Gln, Ala,
248 or Pro"
250 (ix) FEATURE:
251 (A) NAME/KEY: Modified-site
252 (B) LOCATION: 45
253 (D) OTHER INFORMATION: /note= "Xaa at position 45 is Gln,
254 Pro, Phe, Val, Met, Leu, Thr, Lys, Trp, Asp, Asn, Arg,
255 Ser, Ala, Ile, Glu, or His"
257 (ix) FEATURE:
258 (A) NAME/KEY: Modified-site
259 (B) LOCATION: 46
260 (D) OTHER INFORMATION: /note= "Xaa at position 46 is Asp,
261 Phe, Ser, Thr, Cys, Glu, Asn, Gln, Lys, His, Ala, Tyr,
262 Ile, Val, or Gly"
264 (ix) FEATURE:
265 (A) NAME/KEY: Modified-site
266 (B) LOCATION: 47
267 (D) OTHER INFORMATION: /note= "Xaa at position 47 is Ile,
268 Gly, Val, Ser, Arg, Pro, or His"
270 (ix) FEATURE:
271 (A) NAME/KEY: Modified-site
272 (B) LOCATION: 48
273 (D) OTHER INFORMATION: /note= "Xaa at position 48 is Leu,
274 Ser, Cys, Arg, Ile, His, Phe, Glu, Lys, Thr, Ala, Met,
275 Val, or Asn"
277 (ix) FEATURE:
278 (A) NAME/KEY: Modified-site
279 (B) LOCATION: 49
280 (D) OTHER INFORMATION: /note= "Xaa at position 49 is Met,
281 Arg, Ala, Gly, Pro, Asn, His, or Asp"
283 (ix) FEATURE:
284 (A) NAME/KEY: Modified-site
285 (B) LOCATION: 50
286 (D) OTHER INFORMATION: /note= "Xaa at position 50 is Glu,
287 Leu, Thr, Asp, Tyr, Lys, Asn, Ser, Ala, Ile, Val, His,
288 Phe, Met, or Gln"
290 (ix) FEATURE:
291 (A) NAME/KEY: Modified-site
292 (B) LOCATION: 51
293 (D) OTHER INFORMATION: /note= "Xaa at position 51 is Asn,
294 Arg, Met, Pro, Ser, Thr, or His"
296 (ix) FEATURE:

VERIFICATION SUMMARY
PATENT APPLICATION: US/10/083,446

DATE: 03/14/2002
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Input Set : A:\PTO.VSK.txt
Output Set: N:\CRF3\03142002\J083446.raw

L:38 M:220 C: Keyword misspelled or invalid format, [(A) APPLICATION NUMBER:]
L:39 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]
L:743 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:746 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:749 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:752 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:755 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:758 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:761 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1
L:895 M:220 C: Keyword misspelled or invalid format, [(D) OTHER INFORMATION:]
L:926 M:220 C: Keyword misspelled or invalid format, [(D) OTHER INFORMATION:]
L:1146 M:220 C: Keyword misspelled or invalid format, [(D) OTHER INFORMATION:]
L:1216 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:1219 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:1222 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:1225 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:1228 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:1231 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:1234 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:1481 M:220 C: Keyword misspelled or invalid format, [(ix) FEATURE:]
L:1552 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:1555 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:1558 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:1561 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:1564 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:1567 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:1570 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3
L:2250 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:2253 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:2256 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:2259 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:2262 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:2265 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:2268 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:2308 M:220 C: Keyword misspelled or invalid format, [(D) OTHER INFORMATION:]
L:2649 M:220 C: Keyword misspelled or invalid format, [(D) OTHER INFORMATION:]
L:2714 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:2717 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:2720 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:2723 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:2726 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:2729 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:2732 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:3044 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:3047 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:3050 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:3053 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:3056 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6

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L:3059 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:3062 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6
L:3091 M:220 C: Keyword misspelled or invalid format, [(D) OTHER INFORMATION:]
L:3138 M:220 C: Keyword misspelled or invalid format, [(B) LOCATION:]
L:3354 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:3357 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:3360 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:3363 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:3366 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:3369 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:3372 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7
L:3419 M:220 C: Keyword misspelled or invalid format, [(A) NAME/KEY:]
L:3479 M:220 C: Keyword misspelled or invalid format, [(B) LOCATION:]
L:3497 M:220 C: Keyword misspelled or invalid format, [(B) LOCATION:]
L:3573 M:220 C: Keyword misspelled or invalid format, [(B) LOCATION:]
L:3668 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8